We claim:

1

11

- 2 1. A method of inducing the regression of dermal tumors in humans which comprises the step of
- administering a bacterial product comprising heat-killed *P. acnes* bacteria selected from the group
- 4 consisting of Propionibacterium acnes, Propionibacterium avidum, Propionibacterium
- 5 lymphophilum, Propionibacterium granulosum, Cornynebacterium parvum or Arachnia
- 6 propionica.
- 7 2. The method of claim 1 wherein the bacterial product that is administered comprises heat-killed
- 8 Propionibacterium acnes
- The method of claim 1, wherein the method induces the regression of dermal tumors caused by
- the human papilloma virus.
 - 4. The method of claim 1, wherein the bacterial product further comprises an anesthetic.
- 5. The method of claim 4, wherein the anesthetic is selected from the group consisting of aminoamides and aminoesters.
- The method of claim 4, wherein the anesthetic is lidocaine.
- The method of claim 1, wherein the bacterial product further comprises carriers and fillers.
- 16 8. The method of claim 7, wherein the carriers are selected from the group consisting of sugars including but not limited to lactose, saccharose, mannitol, sorbitol, and cellulose preparations.
- 18 9. The method of claim 7, wherein the carriers are selected from the group consisting of amino acids including but not limited to glycine.
- 20 10. The method of claim 7, wherein the fillers are selected from the group consisting of starch
- 21 pastes that use corn, wheat, rice or potato starch, gelatin, methylcellulose,
- 22 hydroxypropylmethylcellulose, and sodium carboxymethylcellulose.
- 23 11. The method of claim 1, wherein the bacteria are heat-killed by the process of heating the *P*.
- 24 acnes in a water bath at 74 ° C to 90 ° C for 60 to 90 minutes.

- 1 12. The method of claim 1, wherein the bacterial product is suspended in a saline solution.
- 2 13. The method of claim 12, wherein the saline solution comprises sodium chloride in dI water.
- The method of claim 12, wherein the saline solution comprises sodium chloride in a buffer.
- The method of claim 14, wherein the buffer is selected from the group consisting of alkaline
- 5 phosphates and alkaline citrates.
- 6 16. The method of claim 1, wherein the bacterial product is administered intralesionally.
- 7 17. The method of claim 1, wherein the bacterial product is administered subcutaneously.
- 8 18. The method of claim 1, wherein the bacterial product is administered preferably at .001 to 5 mg
- 9 per dosage.
- The method of claim 1, wherein the bacterial product is administered more preferably at .005 to
- 11 2.5 mg per dosage.
- The method of claim 1, wherein the bacterial product is administered most preferably at .01 to
- 13 1 mg per dosage.
- 14 21. A method of treating viral infections of the respiratory tract in humans which comprises the step
- of administering a bacterial product comprising heat-killed *P. acnes* bacteria selected from the group
- 16 consisting of Propionibacterium acnes, Propionibacterium avidum, Propionibacterium
- †7 lymphophilum, Propionibacterium granulosum, Cornynebacterium parvum or Arachnia
- 18 propionica.
- 19 22. The method of claim 21 wherein the bacterial product comprises heat-killed
- 20 Propionibacterium acnes.
- 21 23. The method of claim 21, wherein the bacterial product further comprises carriers and fillers.
- 22 24. The method of claim 23, wherein the carriers are selected from the group consisting of sugars
- including but not limited to lactose, saccharose, mannitol, sorbitol, and cellulose preparations.

- 1 25. The method of claim 23, wherein the carriers are selected from the group consisting of amino
- 2 acids including but not limited to glycine.
- The method of claim 23, wherein the fillers are selected from the group consisting of starch
- pastes that use corn, wheat, rice or potato starch, gelatin, methylcellulose, hydroxypropylmethyl-
- 5 cellulose, and sodium carboxymethylcellulose.
- The method of claim 21, wherein the bacteria are heat-killed by the process of heating the *P*.
- 7 acnes in a water bath at 74 °C to 90 °C for 60 to 90 minutes.
- 8 28. The method of claim 21, wherein the bacterial product is suspended in a saline solution.
- 9 29. The method of claim 28, wherein the saline solution comprises salts selected from the group consisting of alkaline phosphates and alkaline citrates.
- H 30. The method of claim 21, wherein the bacterial product is administered orally.
- The method of claim 21. where the bacterial product is administered with a natural flavoring or artificial flavoring.
- The method of claim 21, wherein the bacterial product is administered preferably at .1 to 10 mg per dosage.
- The method of claim 21, wherein the bacterial product is administered more preferably at 0.5 to 5 mg per dosage.